CORE DESCRIPTION
BLM-1-435.3
469'-479'

Orejon Andesite

Light gray (N7) to medium dark gray (N4) porphyritic Andesite. Matrix consists of an aphanitic ground mass with phenocrysts of plagioclase, altered and unaltered biotite, chlorite and epidote. Plagioclase is the dominant phenocryst making up approximately 90% of the total phenocrysts. Plagioclase is white to translucent, euhedral to anhedral with individual crystals up to 1.5 cm in size. Average size of plagioclase crystals is 2 mm with alteration to clays common along mineral borders. Biotite phenocrysts up to 1 cm in size are present. Alteration of biotite to green chlorite and orange iron-stained biotites is present. The core is massive in texture with no flow structures or layers. The rock is very hard and dense with no significant matrix permeability observed. Fractures are present with the majority oriented at 60° off horizontal. Fractures range in size from hairline to 1 cm in thickness and are typically planar. All fractures have been healed with white, anhedral to euhedral calcite. Some cross-cutting of fractures, indicating at least 2 periods of fracturing is observed. Some brecciation of matrix rock has occurred along fractures with the evidence of rock fragments in the calcite fracture fill. Angular fragments up to 2 cm are observed, a few hollow cavities up to 5 cm are present with internal euhedral, calcite crystals present. Some calcite crystals are up to 4 mm in diameter. No significant porosity interconnection between cavities is observed. The only possibly avenue for fluid flow through these rocks is with open cavities within the calcite fill itself. This is a very low percentage of rock. Some red iron oxidation is found along fracture boundaries. The nature of the porphyritic texture indicates a relatively slow cooling volcanic rock, either as a thick extrusive flow or as a small intrusive body.